



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D205-634-145
Job Sheet 171291



Part No: D205-634-145

Job Qty: 1 ea

Part Name: Replacement Skidtube with Thru-Bolt Standard Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/30/18

Job Tracking No:

Due Date: 2/12/18

Created By: Michelle Gagnon-Donovan

Type: Stock

Description:

Note: DWG D2580-049 REV H, IIN-D205-634 REV I IPP REV:B 14.04.21 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		2/9/18	0.00	0.00	Start Up Skid tubes-1		MGR
110	Skid tubes	1 pcs		2/10/18	0.00	2.01	Skid tubes-2		MGR
120	CNC Bend Skid tubes	1 pcs		2/10/18	0.49	0.60	CNC Bend Skid tube		MGR J.S.H.
130	Skid tubes	1 pcs		2/10/18	0.00	2.01	Skid tubes-2		MGR
140	QC	1 pcs		2/10/18	0.00	0.00	QC5		DE
150	Skid tubes	1 pcs		2/10/18	0.00	2.01	Skid tubes-2		MGR, DE
160	QC	1 pcs		2/10/18	0.00	0.00	QC10		38 DAS
170	QC	1 pcs		2/10/18	0.00	0.00	QC5		38 38
180	HandFinish	1 pcs		2/10/18	0.00	1.07	HandFinish2		SA 18-04-17
190	Powdercoat	1 pcs		2/10/18	0.00	0.18	Powdercoat1		BR/ 18-04-19
200	QC	1 pcs		2/10/18	0.00	0.00	QC3		18-04-20
210	HandFinish	1 pcs		2/12/18	0.00	1.07	HandFinish4		18-05-09
220	QC	1 pcs		2/12/18	0.00	0.00	QC5		38
225	DC	1 pcs		2/12/18	0.00	0.00	DC		17.10
230	Packaging	1 pcs		2/12/18	0.00	0.00	Packaging3-1		18/05/11
240	QC21-FG	1 Ea		2/12/18	0.00	0.00	QC21		

Part Op 110 - 1- PICK D2580-1 2- SPOT DRILL 2 AFT RUN ON WEARPLATE HOLES USING DT10021, DRILL 3.630" HOLES
Descriptions: USING DT8462 (83.94" FROM AFT OF D2580-1 REF. ONLY)

120 - 1-Bend as per program D2580 SKID on CNC Bender and Folio FT 16 2-Cut tubes as per Dwg. D2580 3- Scribe batch# in aft end of tube

130 - 1-Deburr ends after cutting and remove bending marks. Prepare tube for welding D2576-3 step remove alodine as required. 2-Locating from most fwd saddle hole, drill most fwd wearplate hole using DT9793 (10.832 REF) as per dwg D2580 sheet 7. 3-Open run-on wearplate holes to finished size 0.508" at locations (5.338/ 5.985/ 10.832/ 3.63 REF) as per dwg D2580 sheet 7. 4-Drill pilot holes for aft cap using DT8215, Open to finished size.

150 - 1-Weld step D2576 as per Dwg. D2580 and QSI 004 A/R Aluminum Rod 038611 - Grind welds flush. 2-Touch up alodine on run on wearplate holes prior to swaging 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and as per dwg 4-DRILL TOWING HOLE USING DT8091 5-DEBURR

180 - Realodine tube as per QSI 005

190 - START TIME: 10:55 OVEN TEMPERATURE: 320° FINISH TIME: 11:25
210 - 1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 118787 Sikaflex expire date: 18/12 2-Coat D2594-3 O' rings with

220 - Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

225 - Photocopy D205-634 bluefile & type labels per PPP D205-634-145 CHG001

230 - Identify and pack for shipping as per PPPD205-634-145 Location : FG073

Wingwalk 1138761

Plex 2/7/18 8:53 AM Dart.Gagnon.Michelle

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D2580-1	205 Bent Tube	1 Ea (1 ea)	90-Start up Operation	S053988
AN3-5A	Bolt	2 Ea (2 ea)	210-HandFinish	
AN4-45A	Bolt	8 Ea (8 ea)	210-HandFinish	
D2570	Bushing	16 Ea (16 ea)	210-HandFinish	
D2576-3	Step (Machining Detail)	1 Ea (1 ea)	210-HandFinish	B156023
D2594-1	Plug	8 Ea (8 ea)	210-HandFinish	
D2594-3	O-Ring	8 Ea (8 ea)	210-HandFinish	
D2855	Cap	1 Ea (1 ea)	210-HandFinish	
D4202-1	Spacer	24 Ea (24 ea)	210-HandFinish	S039216
D5061-1	Fwd Wearplate	1 Ea (1 ea)	210-HandFinish	
D5061-3	Aft Wearplate	1 Ea (1 ea)	210-HandFinish	
MS21042-4	Nut	8 Ea (8 ea)	210-HandFinish	
NAS1149D0332J	Washer	2 Ea (2 ea)	210-HandFinish	

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2580-1	1	5	0
210-HandFinish	AN3-5A S041106	2	263	0
	AN4-45A S017093	8	110	0
	D2570 S046993	16	388	0
	D2576-3	1	45	0
	D2594-1 S054786	8	428	0
	D2594-3 S049975	8	581	0
	D2855 F147805	1	74	0
	D4202-1	24	959	0
	D5061-1 S054565	1	3	0
	D5061-3 S054563	1	3	0
	MS21042-4 S038763	8	203	0
	NAS1149D0332J S020606	2	4,012	0

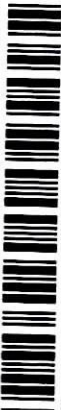
Part Specifications
Specifications could not be found.

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Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 832-5200
Email: sales@dartaero.com
www.dartaerospace.com



Container No: S056289



Part: D205-634-145

Job No: 171291

Serial No/Batch: S056289

Revision:

Inspector:

Date: 03/29/18

003108

ITEM	QTY -041	QTY -045	QTY -047	QTY -048	PART NUMBER	DESCRIPTION
1	X				D2580-041	SKIDTUBE ASSEMBLY
2		X			D2580-045	SKIDTUBE ASSEMBLY
3			X		D2580-047	SKIDTUBE ASSEMBLY
4				X	D2580-048	SKIDTUBE ASSEMBLY
20	1	1	1	1	D2500-1-100	EXTRUSION
21			16	16	D2570	BUSHING
22	1	1	1	1	D2570-3	STEP
23		4			D2579	SPACER
24	16	16	8	8	D2594-1	PLUG
25	16	16	8	8	D2594-3	O-RING
26	1	1	1	1	D2596	205 WEB
27	1	1	1	1	D2555	AFT CAP
28	1	1			D3584-5	WEARSHOE
29	1	1			D3584-9	WEARSHOE
30	1	1			D3584-11	WEARSHOE
31	1	1			D3584-13	WEARSHOE
32	20	20	24	24	D4202-1	SPACER
33			1		D4405-041	WEARPLATE ASSEMBLY
34			1		D4405-043	WEARPLATE ASSEMBLY
35				1	D5051-1	FWD WEARPLATE
36				1	D5051-3	AFT WEARPLATE
50	50	50			ALS7-1032-130 or AK57-1032-130 or AK54-1032-130 or AELS-1032-130	INSERT
51	50	50			AN304A	BOLT
52	2	2	2	2	AN3-5A	BOLT
53			8	8	AN4-45A	BOLT
54	50	50			NAS1149C0332R	WASHER (AN890C10L)
55	2	2	2	2	NAS1149D0332J	WASHER (AN890JD10L)
56			8	8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT (-041/-047/-048) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT (-045) GREEN SANDTEX (REF 4.3.5.5) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 33.7 lbs
D2580-045 = 33.7 lbs
D2580-047 = 45.1 lbs
D2580-048 = 32.0 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN304A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241A-201.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047/-048)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2555 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

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SUBJECT TO AMENDMENT

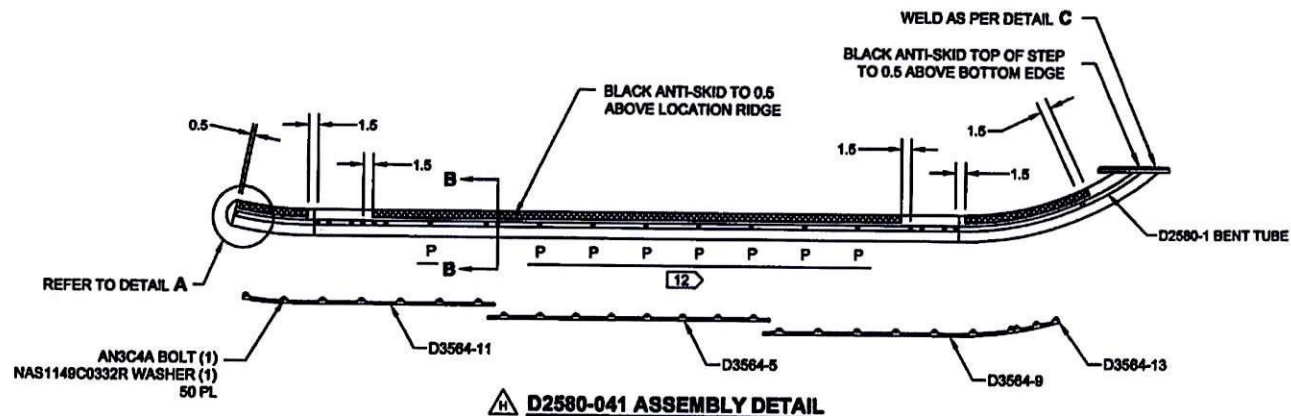
WITHOUT NOTICE
WORK ORDER

NO. 171291
FEB 08 2018

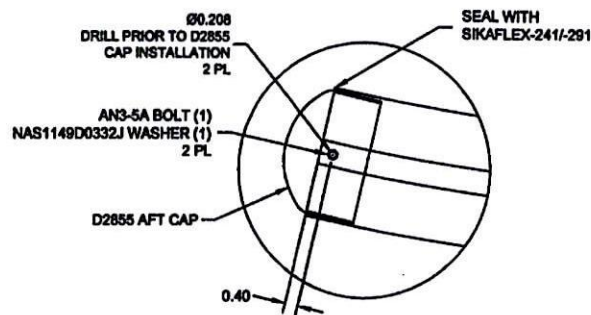
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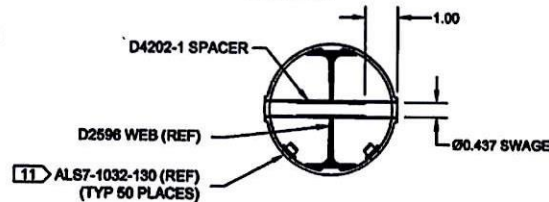
H	SHEET: PL DELETE D3586-11-54-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS	SAD	17.06.09
G	ADDED -048, -047 WEIGHT UPDATED PER DSI 9098	AJS	14.04.09
F	INCORPORATE DEO D2580-E-1 PER PAR12-218	DC	13.06.20
E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS T02577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO 8S WEARPLATES AND GASKETS, INCLUDE DEO 8124/ 8183	PH	07.04.06
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	06.06.26
B	AS MANUFACTURED	DS	06.12.02
A	NEW ISSUE	DS	06.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DS	DRAWING NO.	REV. H
MFG. APPR.	DS	D2580	SHEET 1 OF 9
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DE APPR.	DS	205 SKIDTUBE ASSEMBLY	NTS
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DETAIL A
SCALE 5X

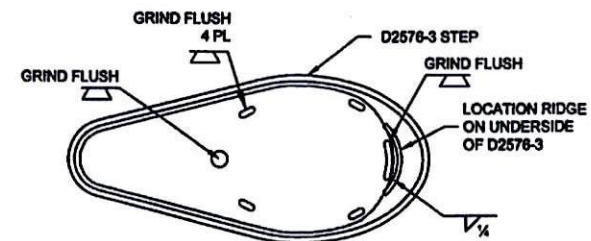


SECTION B-B
SCALE 5X



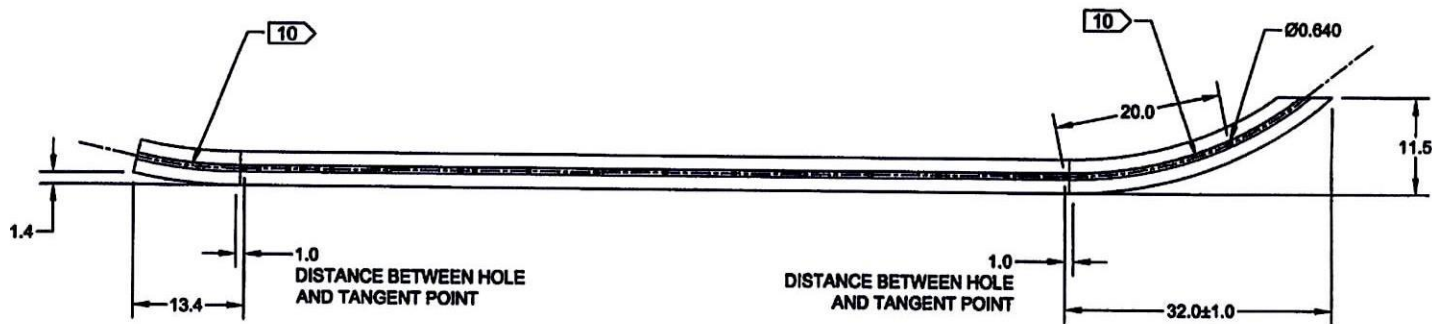
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (20 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

DETAIL C
SCALE 5X



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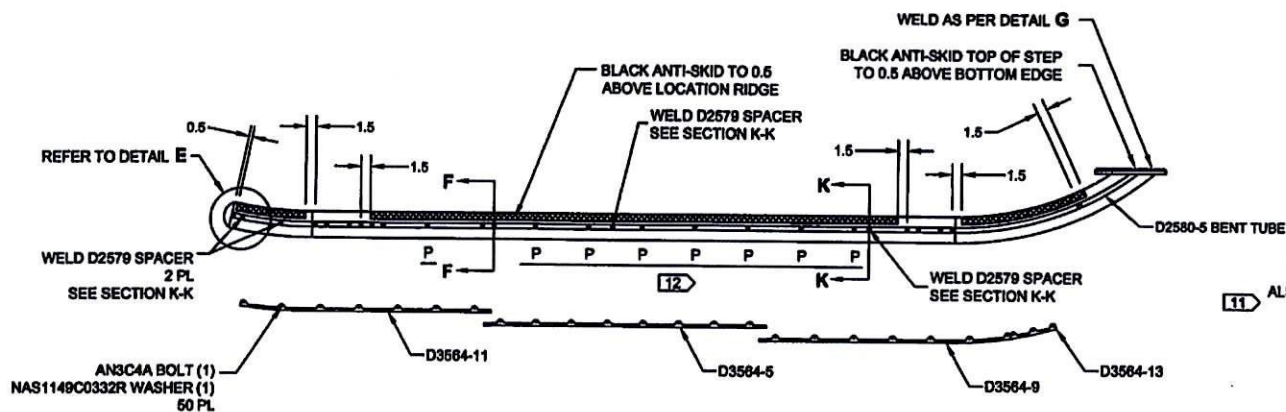
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D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

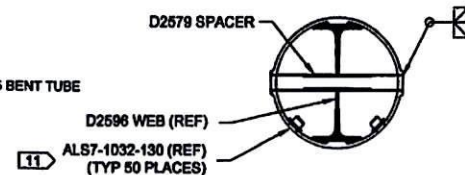
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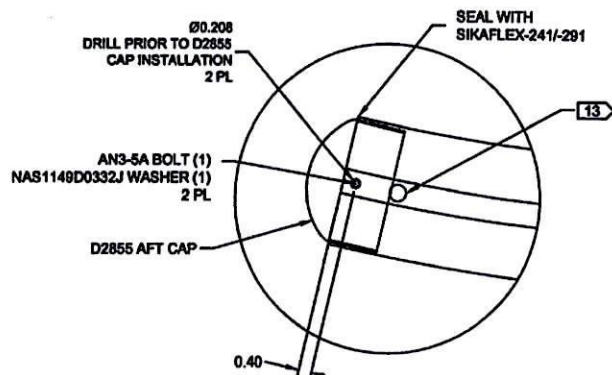
D2580-045 ASSEMBLY DETAIL

**SECTION K-K
SCALE 5X**

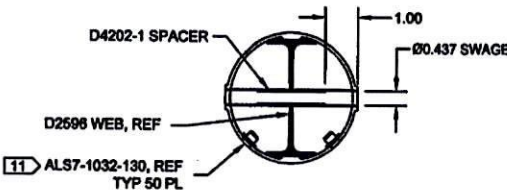


AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (4 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. DO NOT C-BORE

**DETAIL E
SCALE 5X**

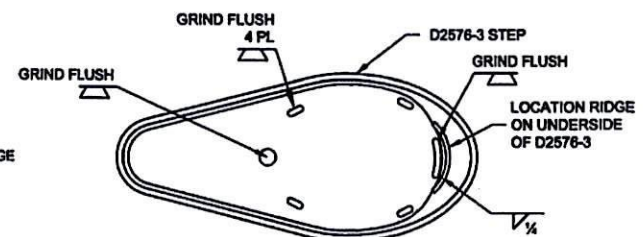


**SECTION F-F
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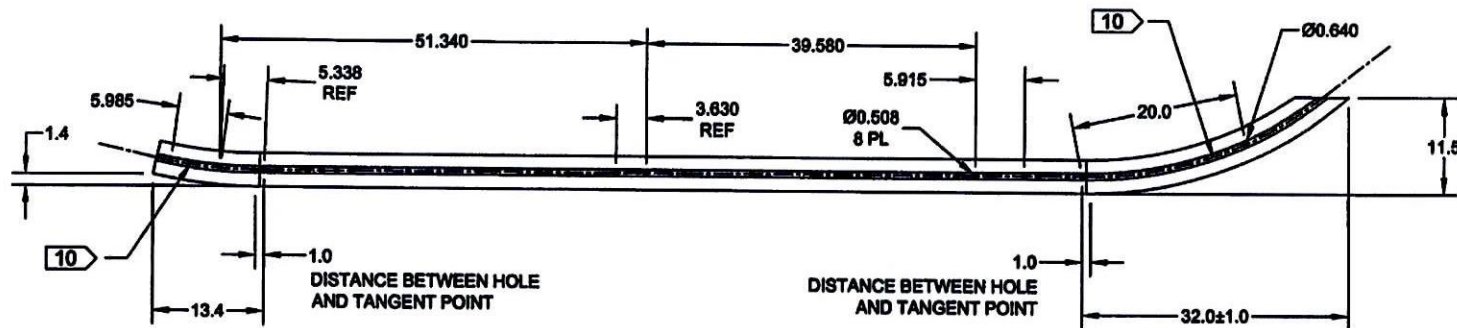
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (20 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002

**DETAIL G
SCALE 5X**



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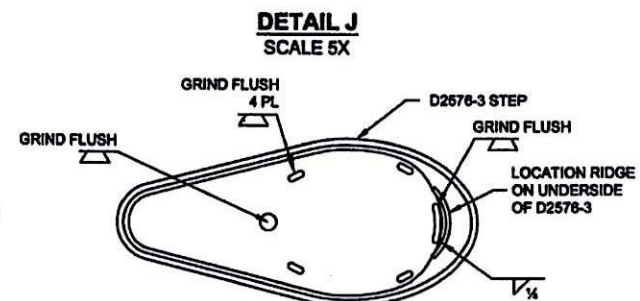
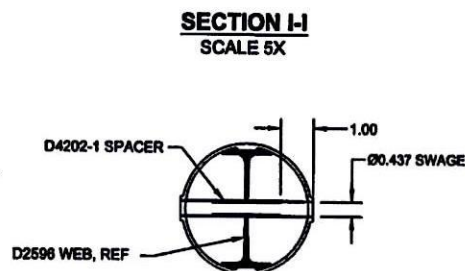
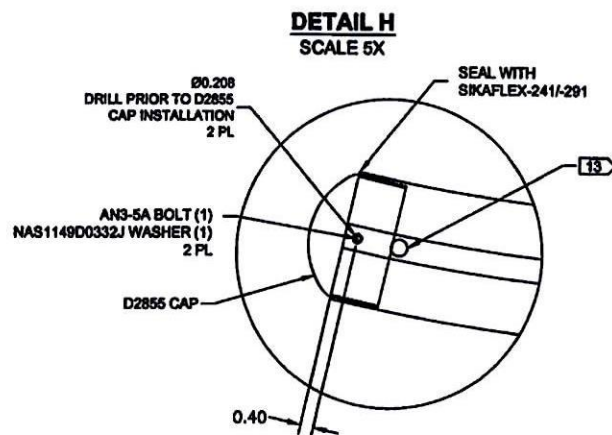


D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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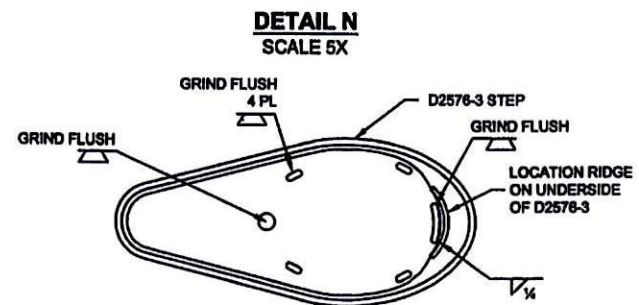
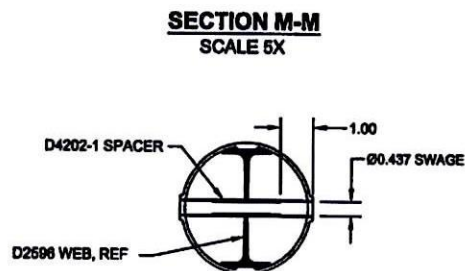
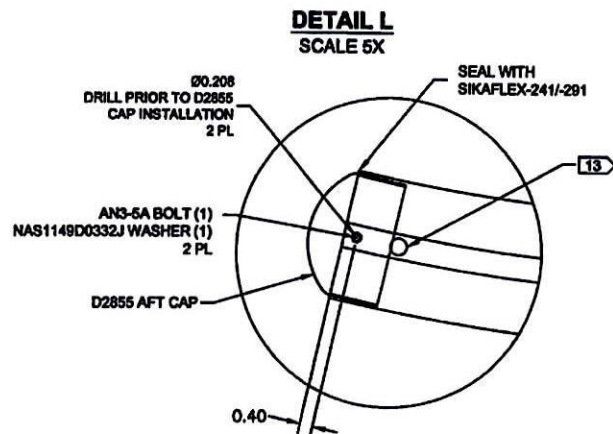
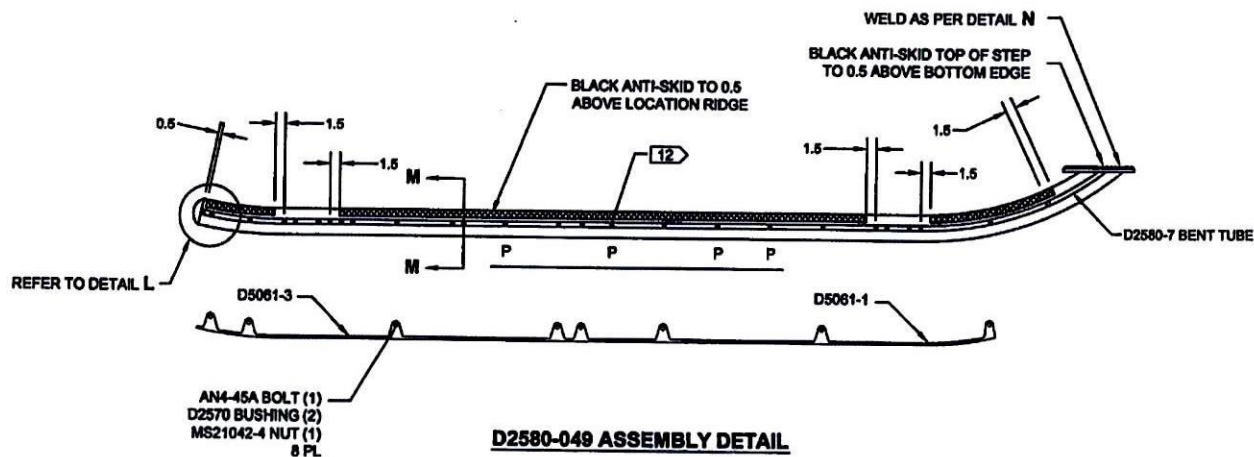


**AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:**

- 1. INSERT D4202-1 SPACER (24 PLACES)**
- 2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002**
- 3. TRIM/GRIND FLUSH PER QSI 002**

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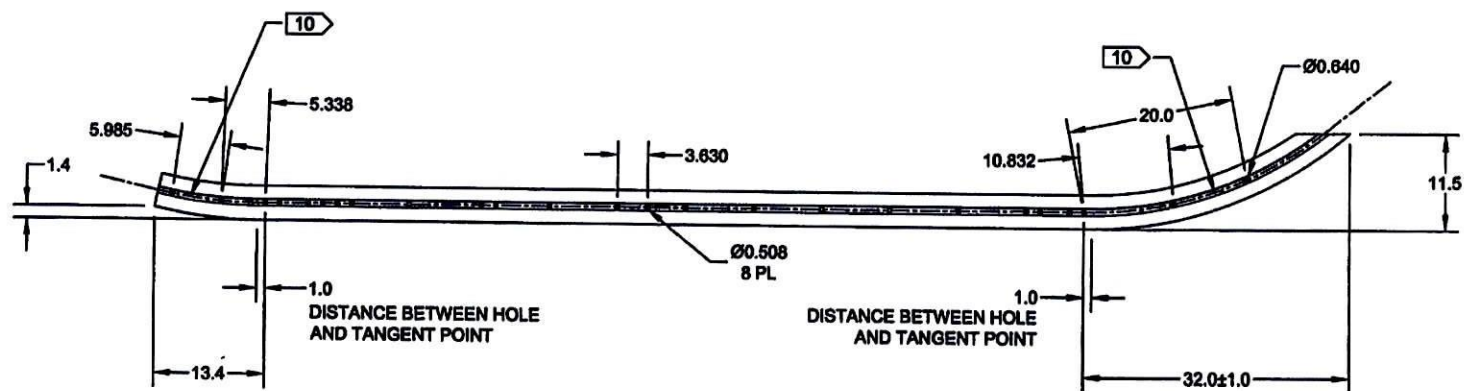
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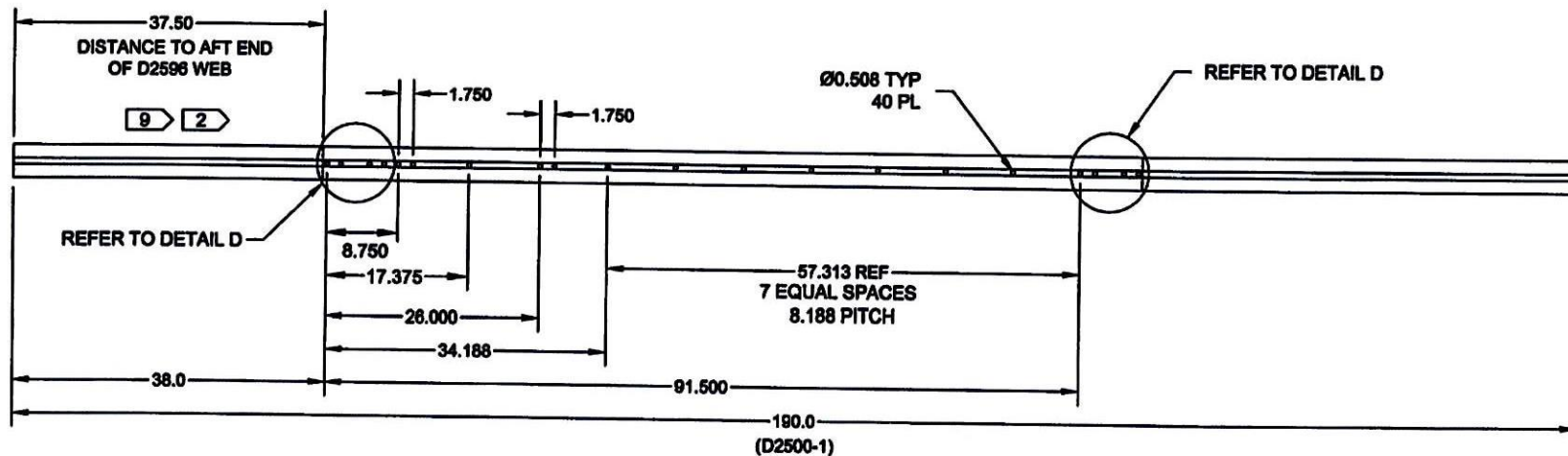
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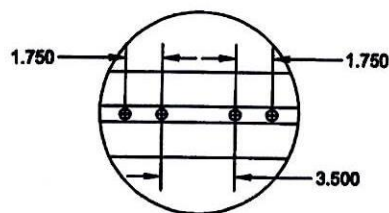
D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 8 OF 9
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	205 SKIDTUBE ASSEMBLY	NTS
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D2580-101 TUBE



DETAIL D
SCALE 5X

RELEASED
2017 JUL 05

DESIGN	DS	DART AEROSPACE LTD	
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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 9 OF 9
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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7 6 5 4 3 2 1

Change Record

PAGE 1 OF 1

Part Number: D205-634-145

Description: REPLACEMENT SKIDTUBE w/ THRU BOLT WEARPLATES

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																															
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